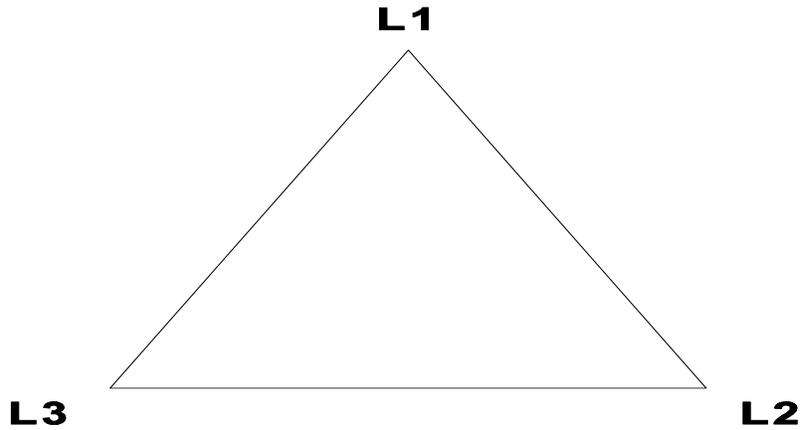


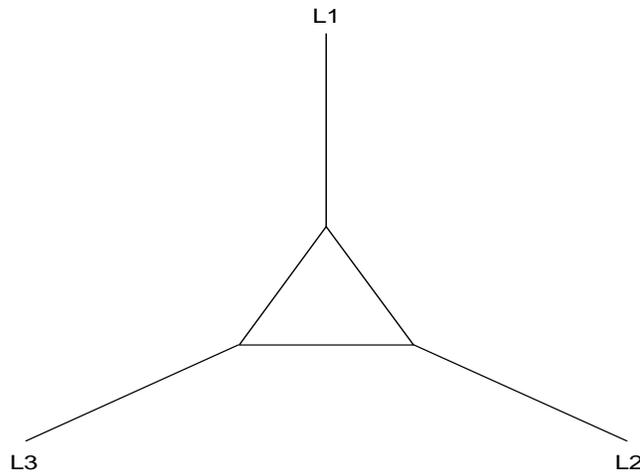
**1. SITE PLAN**

**1.1 Indicate the tower layout relative to north, include relationship of equipment shelter and transmission line entry into shelter.**

**1.1.1 Self Supporting Tower -show site view and assign legs a letter designation.**



**1.1.2 Guyed Tower - show site view and assign anchors & legs a letter designation.**



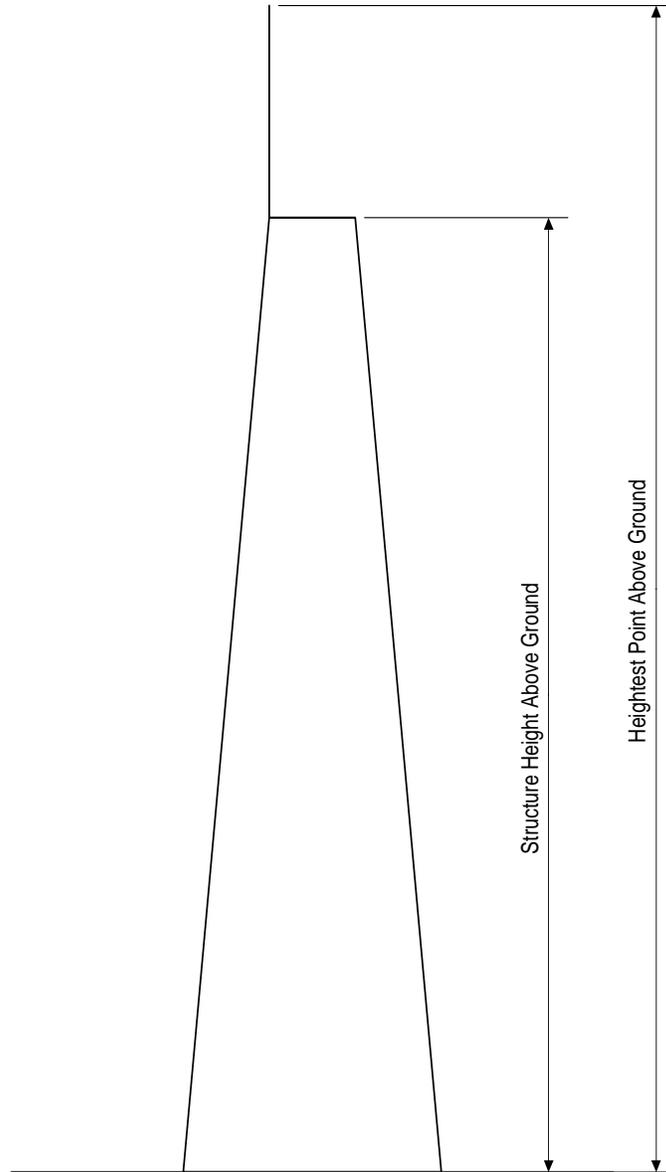
SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

**2. TOWER ELEVATIONS**

**2.1 Indicate tower height above ground.**

**2.2 Indicate locations of all antennas, antenna mounting brackets, microwave dishes, transmission line sizes to each antenna. This information shall show the tower face/leg each antenna is attached to and include the antenna azimuth relative to north.**



SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

*STATE OF MARYLAND RADIO TOWER INSPECTION SPECIFICATIONS*

**3. TOWER STRUCTURE**

- 3.1 **General conditions?** \_\_\_\_\_
- 3.2 **Are any loose bolts present?**..... \_\_\_\_\_
- 3.3 **Are any damaged members present?** ..... \_\_\_\_\_
- 3.4 **Are signs of unusual stress or vibration present?** ..... \_\_\_\_\_
- 3.5 **Any missing members?** ..... \_\_\_\_\_
- 3.6 **Are climbing ladders, platforms and safety equipment secure?** ..... \_\_\_\_\_

**3.7 Structural Members**

3.7.1 Spot check at least ten (10) bolts on vertical tower members at intervals of approximately twenty-five (25) feet apart on all tower faces.

Satisfactory  
Unsatisfactory  
(See Item 9)

3.7.2 Record the number of bolts and/or nuts that were found missing.  
\_\_\_\_\_

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

3.7.3 Record the percentage of bolts that were checked and found to be loose. \_\_\_\_\_

3.7.4 Inspect structural members for fractures, bends and defective welds.

3.7.5 Ensure the tightness of tower base anchor bolts.

3.7.6 Inspect the general condition of stub antenna towers.

<input type="checkbox"/>	<input type="checkbox"/>

3.7.7 Specific weld joint inspections.

3.7.7.1 Guyed tower cantilevered joints above the guy level

3.7.7.2 Guy and torque arm lugs.

3.7.7.3 Welds on equalizer plate where it connects to anchor shaft.

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

**4. TOWER FOUNDATIONS & GUY ANCHORS**

- 4.1 General conditions?**
- 4.1.1** is exposed concrete protected? \_\_\_\_\_
- 4.1.2** are any cracks observed? \_\_\_\_\_
- 4.1.3** are there any signs of movement? \_\_\_\_\_
- 4.1.4** Are anchors clear of brush, vines and trees? \_\_\_\_\_
- 4.1.5** is tower and anchors fenced? \_\_\_\_\_
- 4.1.6** is grading sufficient to ensure proper water drainage? \_\_\_\_\_
- 4.1.7** is guy anchor head clear of earth? \_\_\_\_\_
- 4.1.8** any evidence of anchor bolt corrosion? \_\_\_\_\_
- 4.1.9** any low spots that may collect moisture? \_\_\_\_\_

**4.2 Structural Members**

- |   | Satisfactory             | Unsatisfactory<br>(See Item 9) |
|---|--------------------------|--------------------------------|
| <b>4.2.1</b> Inspect guy plates and rods for bends and fractures.                       | <input type="checkbox"/> | <input type="checkbox"/>       |
| <b>4.2.2</b> Inspect concrete tower foundation(s) for cracking, spalling and settling.  | <input type="checkbox"/> | <input type="checkbox"/>       |
| <b>4.2.3</b> Inspect guy anchor foundations for cracking, weathering and creepage.      | <input type="checkbox"/> | <input type="checkbox"/>       |
| <b>4.2.4</b> Inspect anchor rod condition below earth to a depth of at least 12 inches. | <input type="checkbox"/> | <input type="checkbox"/>       |
| <b>4.2.5</b> has base of tower been properly grouted with sufficient drain holes?       | <input type="checkbox"/> | <input type="checkbox"/>       |
| <b>4.2.6</b> Check drain holes at base for any obstructions                             | <input type="checkbox"/> | <input type="checkbox"/>       |

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

*STATE OF MARYLAND RADIO TOWER INSPECTION SPECIFICATIONS*

**5. GUY WIRES & FITTINGS**

**5.1 General conditions?**

**5.2 Connection points (top and Bottom) condition?**

**5.3 Are end fittings secure?**

**5.4 Is rusting evident?**

**5.5 Is vibration observed?**

Satisfactory	Unsatisfactory (See Item 9)
<input type="checkbox"/>	<input type="checkbox"/>

**5.7 Structural Members**

**5.7.1** inspect all turnbuckles for slippage and their condition

**5.7.2** inspect the turnbuckle jam-nut safeties and cable safeties

**5.7.3** inspect all guy cable clamps for security and slippage.

**5.7.4** Inspect all pre-forms for unwinding and slippage.

**5.7.5** Inspect all shackles, clevises and thimbles.

**5.7.6** Inspect guy wire dead ends.

**5.7.7** Visually inspect all guy wires with binoculars for broken strands and or damaged insulators.

<input type="checkbox"/>	<input type="checkbox"/>

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

*STATE OF MARYLAND RADIO TOWER INSPECTION SPECIFICATIONS*

**5.8 Guy wire tension**

**5.8.1** What method was used for the guy wire tension measurements? \_\_\_\_\_

**5.8.2** What was temperature, wind direction and velocity during guy wire measurements and adjustments? \_\_\_\_\_

**5.8.3 Notes:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**5.8.4** Specific guy wire tension

GUY LEVEL <i>Bottom to top</i>	Measured Tension/Sag			Adjusted Tension/Sag		
	LEG 1	LEG 2	LEG 3	LEG 1	LEG 2	LEG 3
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

**5.8.5** Guy wire size? \_\_\_\_\_

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

**ANTENNAS, MICROWAVE DISHES & TRANSMISSION LINES**

**6. General conditions?**

Satisfactory	Unsatisfactory (See Item 9)
<input type="checkbox"/>	<input type="checkbox"/>

**6.1 Was any loose hardware found?**

**6.2 Was any antenna misalignment or physical damage present?**

**6.3 Were antenna deicers operational and inspected? (If applicable.)**

**6.4 Specific Hardware Inspections**

**6.4.1** Inspect all antennas, microwave dishes, feed horns and radomes for any signs of damage and shifting

<input type="checkbox"/>	<input type="checkbox"/>
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**6.5** Inspect all antenna coaxial cables, jumpers and fittings.

**6.5.1** Are all cable transitions properly waterproofed?

**6.5.2** Inspect all antenna mounting brackets, supports and bracing.

**6.5.3** Inspect all transmission lines for damage, loose bolts and water & air leaks.

**6.5.4** Inspect for loose or missing coaxial cable and waveguide clamps, supports and restrainers.

<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**6.5.5** If transmission line is wrap-locked, spot inspect the protective covering under the wrap-lock for signs of chafing.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

**6.5.6** Ensure that the transmission line supports are no more than four (4) feet apart.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

		Satisfactory	Unsatisfactory (See Item 9)
<b>7. PAINT &amp; OBSTRUCTION MARKING</b>			
<b>7.1 General conditions?</b>		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.2 Is rusting evident?</b>		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.3 Is painting necessary?</b>		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.4 Is there any paint splatter near the surrounding area?</b>		<input type="checkbox"/>	<input type="checkbox"/>
 <b>7.5 Rust &amp; Corrosion</b>			
<b>7.5.1</b> Inspect for any particular portion of the tower that appears to have rust		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.5.3</b> Inspect all antenna mounts and hardware for rust.		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.5.4</b> Inspect all guy plates and rods for rust and corrosion.		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.5.5</b> Inspect all guy cable clamps for rust.		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.5.7</b> Inspect ice shields for rust. (If present)		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.5.8</b> Inspect transmission line clamps and hanger bolts for rust.		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
 <b>7.6 Tower Paint</b>			
<b>7.6.1</b> Inspect percentage of paint for peeling, flaking and fading.		<input type="checkbox"/>	<input type="checkbox"/>
<b>7.6.2</b> Check visual effectiveness of the paint. Does it meet FAA regulations		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

Satisfactory  
Unsatisfactory  
(See Item 9)

**8. ELECTRICAL & LIGHTING SYSTEMS**

**8.1 General condition?**

**8.2 Incandescent lamps replaced?**

Beacons \_\_\_\_\_ Type \_\_\_\_\_

Obstruction \_\_\_\_\_ Type \_\_\_\_\_

**8.3 Incandescent lamp voltage at socket under load?**

LEVEL	SOCKET 1	SOCKET 2	SOCKET 3
TOP			
1/3 from top			
Midway			
2/3 from top			

**8.4 Specific Inspection Items**

**8.4.1** Old incandescent removed and destroyed?

**8.4.2** All lamps found burning?

**8.4.3** All strobe lights found burning?

**8.4.4** Photoelectric control working properly?

**8.4.5** Flasher unit operational?

**8.4.6** Inspect for broken or cracked beacon and obstruction globes?

**8.4.7** Inspect beacon closure bolt?

**8.4.8** Inspect sidelight gasket conditions?

**8.4.9** Inspect beacon and sidelight socket condition?

**8.4.10** Inspect internal wiring of beacon?

**8.4.11** Inspect that all drain holes are open and clean?

**8.4.12** Inspect conduit, conduit clamp and junction box condition?

**8.4.13** Inspect overall appearance of the electrical system connections?

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_

**9. EXPLANATION OF UNSATISFACTORY CONDITIONS**

Specification Section	Description of Condition

SITE LOCATION: \_\_\_\_\_

DATE: \_\_\_\_\_